

# An OLG model of growth with longevity: when grandparents take care of grandchildren

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**Abstract** By assuming that grandparents take care of grandchildren, this paper aims at studying the effects of longevity on long-term economic growth in a model with overlapping generations and endogenous fertility. We show that an increase in longevity may: (i) reduce the long-term economic growth; (ii) increase the supply of labour, and (iii) cause fertility either to increase or decrease depending on the size of time spent by grandparents to raise grandchildren. These findings also hold in an endogenous growth setting à la Romer (J Polit Econ 94:1002–1037, 1986).

**Keywords** Longevity · OLG model

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